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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/785,367	02/23/2004	Thomas Rausch	P/2107-248	8977
2352 7590 07/05/2007 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			EXAMINER KALLIS, RUSSELL	
			ART UNIT 1638	PAPER NUMBER
			MAIL DATE 07/05/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/785,367

Applicant(s)

RAUSCH, THOMAS

Examiner

Russell Kallis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 3-5 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 8-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2007 and 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Claims 2, 6-7 have been cancelled. Claims 1, 3-5, 8-15 are pending and examined.

Rejection of Claims 1, 3-5, 8-15 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-22 of U.S. Patent No. 6,784,399 is withdrawn in view of Applicant's amendments.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

Claims 1, 3-5, 8-15 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is maintained for reasons of record in the office action filed 10/02/2006. Applicant's arguments filed 3/30/2007 have been fully considered but they are not persuasive.

Applicant asserts that amending the claim to recite 'apoplastic' invertase inhibitor and that the nucleotide sequence has 80% sequence identity to a cDNA from a cDNA library from flowers with young ovules of a plant would provide sufficient information for one of ordinary skill in the art to surmise that Applicant was in possession of the invention as broadly claimed

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and that the Examiner provided no evidence to support the assertions to a lack of written description (response page 9). With respect to Applicant's remarks directed to lack of evidence, it would be remiss upon the Examiner not to point out to Applicant that the lack of evidence is the lack of evidence of Applicant's possession of the invention as broadly claimed. Further, with respect to what one of ordinary skill would expect to find in a young seed ovule cDNA library, Applicant is reminded that the written description requirement states that Applicant must demonstrate possession. Applicant's remarks are about structural features common to sequence expressed during seed development and not apoplastic invertase inhibitors. Clearly, a cDNA library does not provide support for written description of a genus of invertase inhibitors. Moreover, the claim is an invitation to go fishing for sequences rather than any demonstration of possession of the invention as broadly claimed.

Claims 1, 3-5, 8-15 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a process for producing a transgenic plant where the seed have an increased amount of reserves by transforming with the isolated endogenous apoplastic invertase inhibitor coding sequence in sense orientation, bearing seed with increased reserve content, does not reasonably provide enablement for a process of inhibiting invertase in a plant by transforming the plant with a sequence having 80% sequence identity to an apoplastic invertase inhibitor coding sequence expressed during seed development in flowers with young ovules. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. This rejection is maintained for reasons of record in the office action filed

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10/02/2006. Applicant's arguments filed 3/30/2007 have been fully considered but they are not persuasive.

Applicant asserts that the art is relatively mature for isolating DNA sequences and transforming plants and that one of ordinary skill in the art could derive similar materials and methods for producing other transgenic plants without undue experimentation (response page 10). See *Genentech, Inc. v. Novo Nordisk, A/S*, 42 USPQ2d 1001, 1005 (Fed. Cir. 1997), which teaches that disclosure of a "mere germ of an idea does not constitute [an] enabling disclosure", and that "the specification, not the knowledge of one skilled in the art" must supply the enabling aspects of the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-5, 8-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Dependent claims are included in all rejections. This rejection is maintained for reasons of record in the office action filed 10/02/2006. Applicant's arguments filed 3/30/2007 have been fully considered but they are not persuasive.

Applicant asserts that amending the claim to recite 'apoplastic' invertase inhibitor and that the nucleotide sequence has 80% sequence identity is to a cDNA from a cDNA library from flowers with young ovules of a plant further clarifies claim 1 (response page 11).

The term "80% sequence identity" in claim 1 is a relative term that renders the claim indefinite. The term "80% sequence identity" is not defined by the claim, the specification does

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not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The claim is indefinite because it claims percent identity to sequences, the identities of which are not disclosed (i.e. a sequence identifier), and thus there is no measure of the metes and bounds of 80% sequence identity.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kallis whose telephone number is (571) 272-0798. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Russell Kallis Ph.D.  
June 25, 2007

RUSSELL P. KALLIS, PH.D.  
PRIMARY EXAMINER

*Russell Kallis*